Standardized Outline
Corrective Action Decision Document
July 17, 2001

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Executive Summary

1.0 Introduction

Identify the site(s), their location(s), Corrective Action Unit (CAU) number(s) and Corrective Action Site (CAS) number(s). Provide a concise statement relating the corrective action being proposed to the provisions of the Federal Facility Agreement and Consent Order (FFACO).

1.1 Purpose

Provide a concise updated description of the CAU, reference previous documentation and state the purpose of this document, namely to develop and evaluate corrective action alternatives arising as a result of the corrective action investigation and provide a rationale for the selection of the preferred alternative.

1.2 Scope

Discuss the scope and substance of activities used to identify, evaluate, and recommend alternatives commensurate with the complexity of the site-specific situations.

1.3 CADD Contents

Summarize the contents of the Corrective Action Decision Document (CADD). (Reference applicable programmatic plans and other documents as appropriate to support the CADD.)

2.0 Corrective Action Investigation Summary

Concisely discuss the subject matter described by the following subject headings. Provide only enough information on the site conditions to facilitate an understanding of the corrective action alternatives and subsequent evaluation. Refer the reader to an appendix for detailed discussion of the results including any changes/modifications to the approved Corrective Action Investigation Plan (CAIP).

2.1 Investigation Activities

Provide a concise description of the investigation activities conducted at the site. Refer to and discuss the validity of the conceptual model developed in the CAIP.

2.2 Results

2.2.1 Provide summary analytical data, plume concentration isopleth maps or graphics that summarize the investigation results and affirm that based on these results the CAU has been adequately characterized.

2.2.2 Summarize the assessment made in the Appendix on how well the results from the CAIP meet the data quality objectives.

2.3 Need for Corrective Action

Identify why corrective action is necessary at this site (e.g., investigation activities determined Resource Conservation and Recovery Act constituents to be present in concentrations above regulatory action levels) and an evaluation of possible remedial alternatives is required. Include a summary of impacted media volume/characteristics that require remediation. Address any site-specific characteristics that may constrain site remedial actions.

3.0 Evaluation of Alternatives

3.1 Corrective Action Objectives

Describe cleanup goals and justify whether regulatory based or risk-based.

3.2 Screening Criteria

List the corrective action standards used to evaluate the potential corrective action alternatives. All corrective action alternatives should be evaluated with respect to the following:

- **$** Protection of human health and the environment
- **$** Compliance with media cleanup standards
- **$** Control the source(s) of the release
- **$** Comply with applicable federal, state, and local standards for waste management

List and concisely describe the remedy selection decision factors that will be used to further evaluate and rank the corrective action alternatives, for example:

- **$** Short-term reliability and effectiveness
- **$** Reduction of toxicity, mobility, and/or volume
- **$** Long-term reliability and effectiveness
- **$** Feasibility

- **$** Cost

3.3 Development of Corrective Action Alternatives

Identify and concisely describe applicable corrective actions and technologies that will be considered for each affected medium. In accordance with the Data Quality Objectives previously established, identify which actions and technologies are not feasible given the contaminant specific and site-specific conditions. Alternatives considered shall at a minimum include:

1) A ANo Action@ alternative as a baseline case with which to compare all other alternatives,

2) An alternative to remove contaminants released to the maximum extent feasible, eliminating or minimizing, the need for long term management,

3) One or more alternatives that involve primarily preventing or controlling exposure through engineering controls and institutional controls, and

4) When appropriate, one or more treatment alternatives that vary the degree of treatment and/or time required for remediation.

Based on historical patterns of remedy selection, preferred technologies for common categories of equivalent sites have been established; alternatives being considered may be limited to those preferred technologies.

3.4 Evaluation and Comparison of Alternatives

Evaluate each remaining feasible alternative in accordance with how well it achieves the corrective action objectives based on the screening criteria given in Subsection 3.2. Discuss and rate each alternative relative to the others.

4.0 Recommended Alternative

Present the preferred corrective action alternative and the rationale for its selection based on the corrective action objectives and screening criteria.

5.0 References

Provide references for the sources of information used during the preparation of the CADD.

Appendices

Corrective Action Investigation Results

Discuss the investigation and present the results. Minimize restating site history, etc.; refer to CAIP, as appropriate. Concisely discuss the field program, focusing on changes or deviations from the planned operation. Present and discuss the results, conceptual site model, quality assurance parameters and data validation results, as appropriate. Present data in tables, lab data reports, boring logs, site cross-sections with plume data, or other graphic representations of the results, as appropriate.

Data Assessment

Assess how well the results from the CAIP meet the data quality objectives using the primary data quality indicators (DQIs) of precision, accuracy, representativeness, comparability, and completeness. Other DQIs used to support the discussion of the analytical data can be sensitivity, recovery, memory effects, limit of quantitation, repeatability, and reproducibility. The assessment must include a reconciliation of the data with the conceptual site model and the model revised as appropriate.

Cost Estimates

Present cost estimates for the construction, installation, operation and maintenance of each alternative. Calculate and present the cost in today=s dollars for each corrective action alternative using time-value-of-money calculations, i.e., discount factors, to facilitate comparison of the alternatives.

Evaluation of Risk

Present assessment of risk for Ano action@ and evaluated alternatives, as appropriate.

Project Organization, include:

1. Name and office telephone number of Project Manager

2. The following statement: AThe identification of the project Health and Safety Officer and the Quality Assurance Officer can be found in the appropriate plan. However, personnel are subject to change and it is suggested that the appropriate DOE or DTRA Project Manager be contacted for further information. The Task Manager will be identified in the FFACO Monthly Activity Report prior to the start of field activities.@ *

* Note: The verbiage has been changed from Bi-Weekly to Monthly per the Letter Agreement approved on April 5, 2004.